

FIG 1A

1B

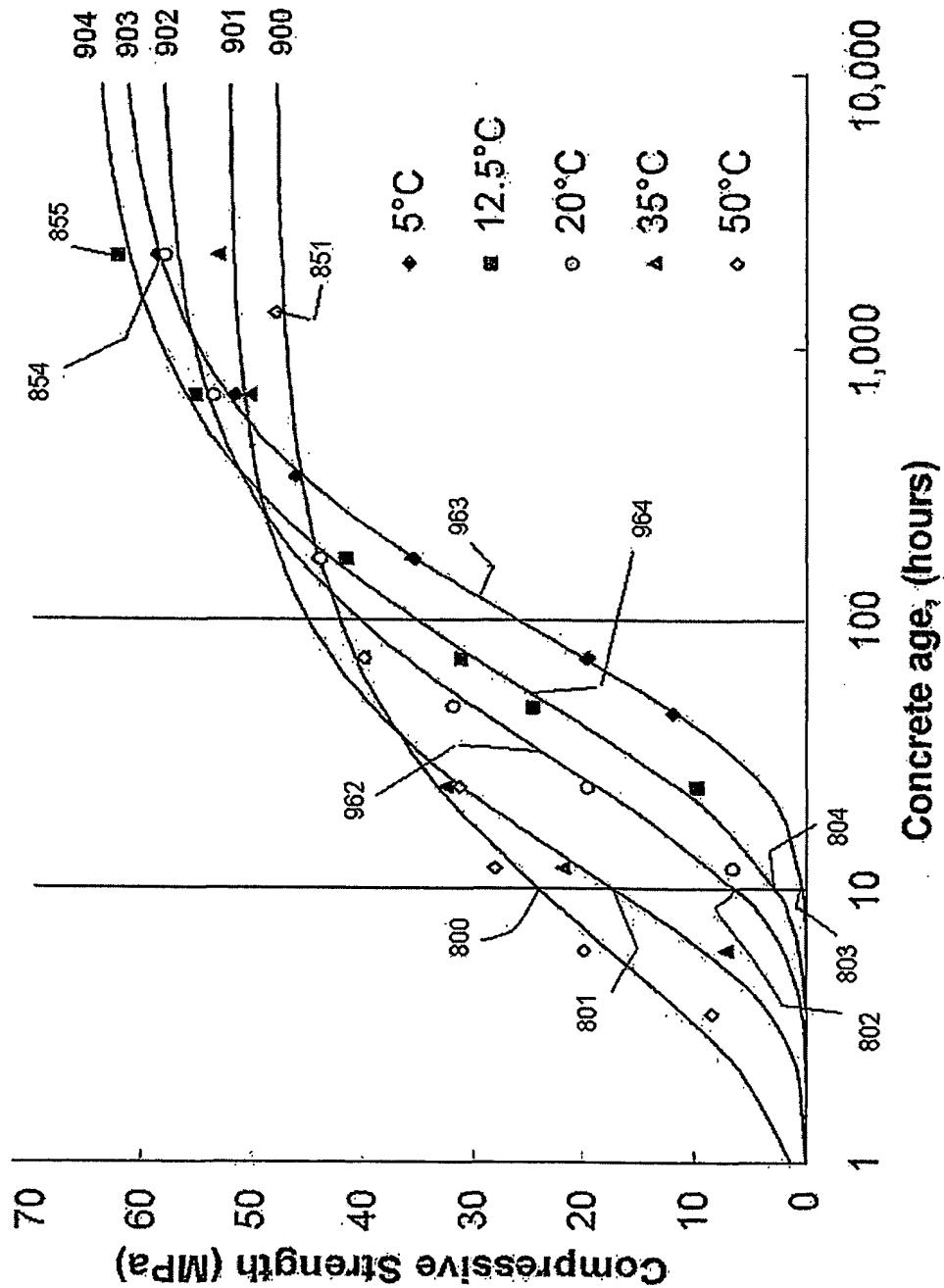


FIG. 2

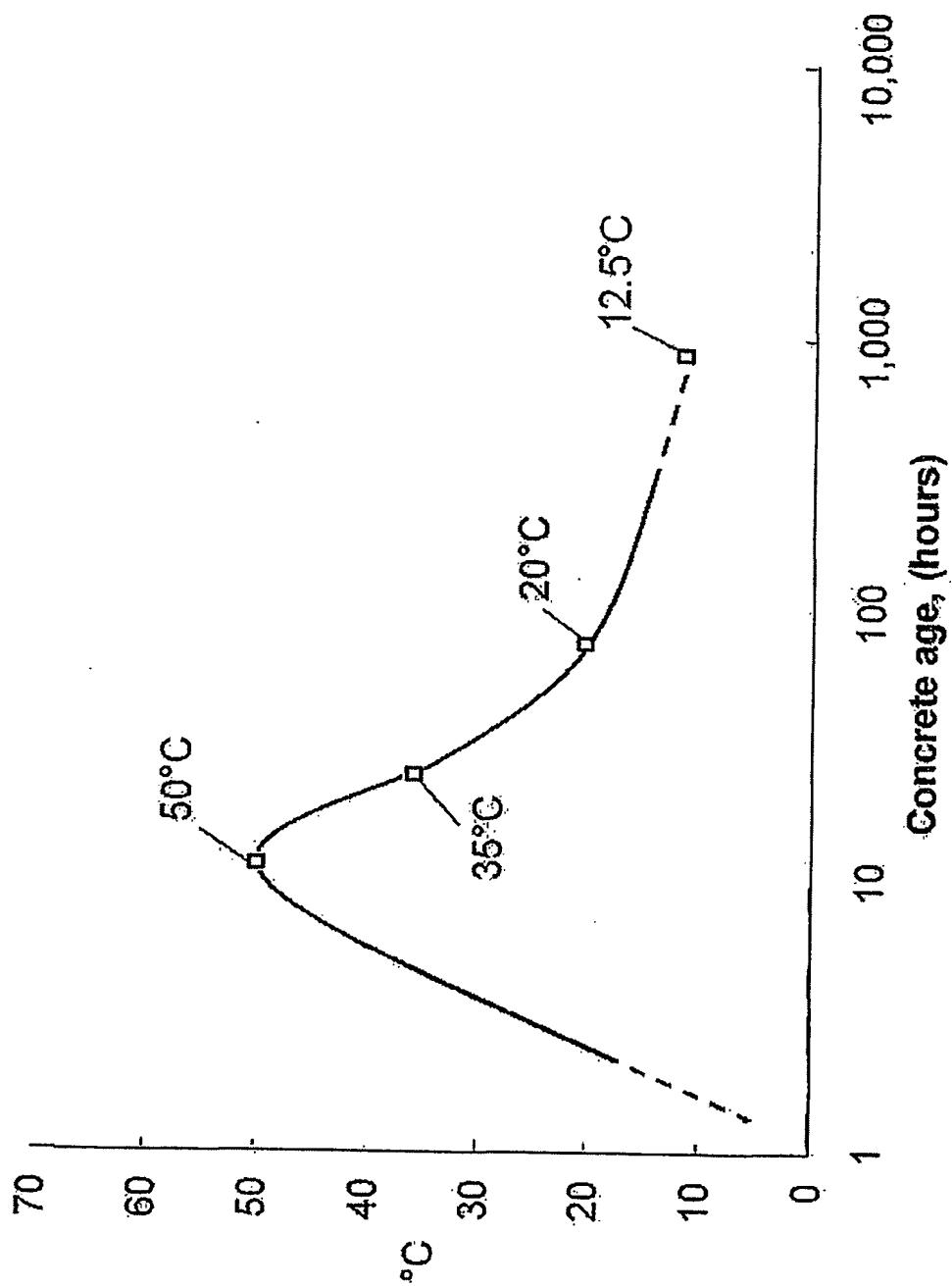


FIG. 2 B

## Carbon Fiber Heating Properties

### Time to Temperature & Heat Transfer Rates

#### Summary of Results

*Data supplied by Reichhold Chemical*

Fiber Architecture	Volts	Amps	Watts per foot	Time in minutes	Temp
2P50K	5	20	100	10	130F
2P50K	5	25	125	10	162F
1P6K	5	10	50	15	274F
2P6K	5	10	50	15	205F
2P6K	5	15	75	15	280F
2P6K	5	20	100	15	300F
3KUNI	4	15	60	10	115F
3KUNI	5	20	100	10	145F
6P12KCL	4	15	60	15	160F
6P12KCL	4	20	80	12	176F
6P12KCL	5	25	125	12	239F
3P12KTRIAK	5	10	50	10	184F
3P12KTRIAK	5	20	100	15	300F
AL Coated Glass 3	5	20	100	15	250F
Copper Screen	1.5	70	105	5	85F

The above table contains test results verified at Reichhold Chemical. The basis of comparison is as follows: 2 square foot piece of carbon fabric drew 100 watts and achieved 130F in 10 minutes.

**FIG. 2C**

HEAT RATE  
8 VDC (3.8 VDC/LF)

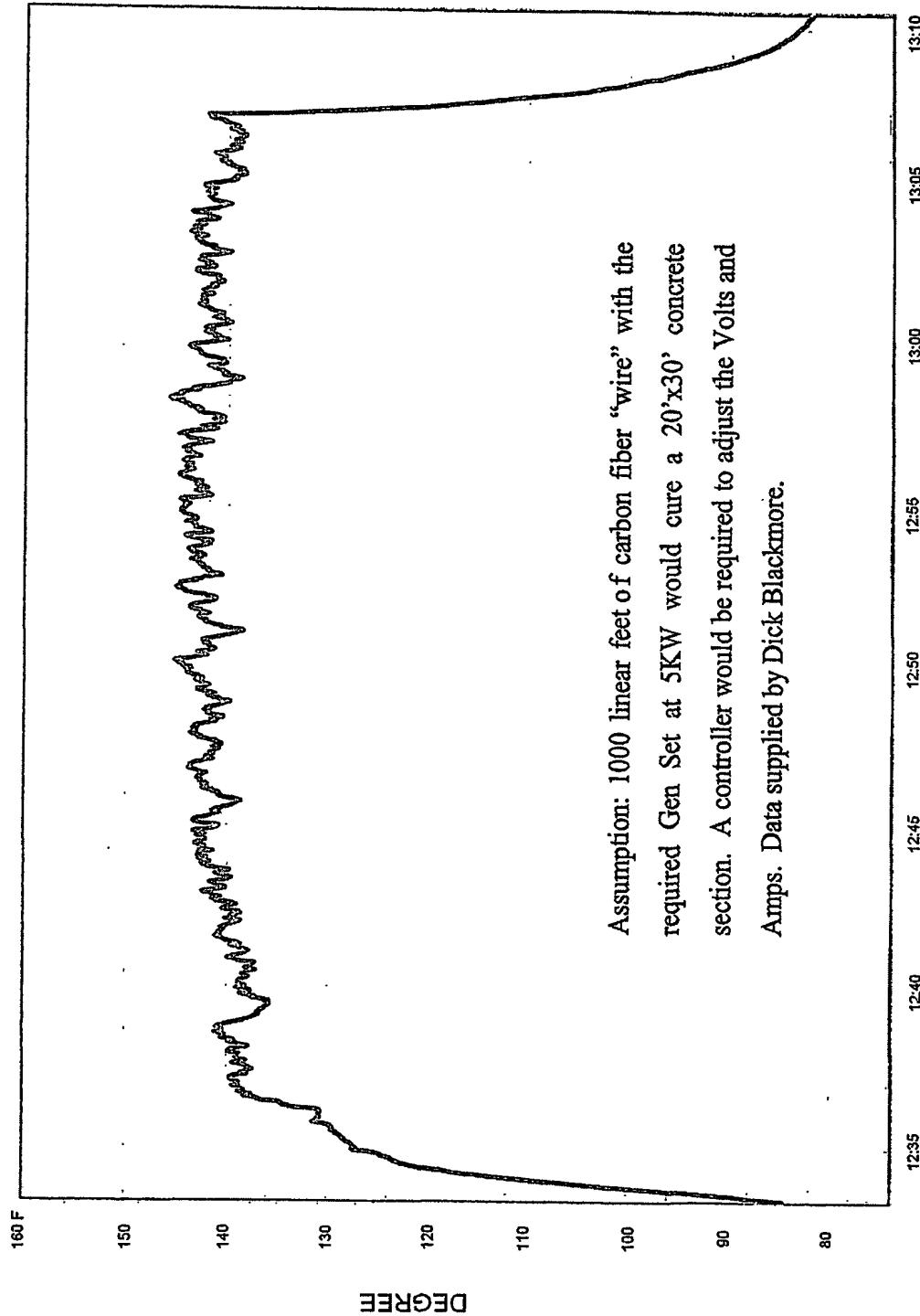
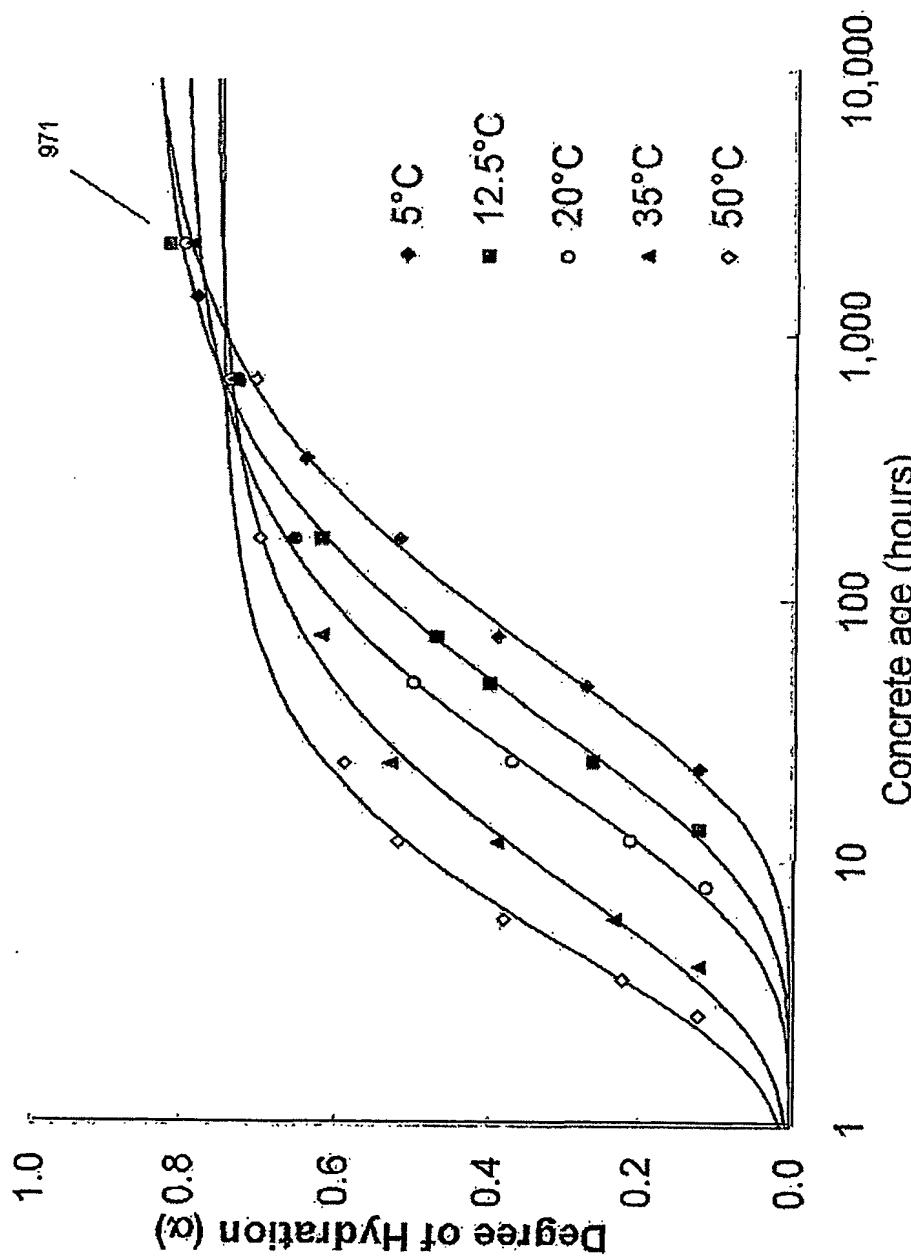


FIG. 2D



Degree of hydration results for mortar, 0.5 w/c

FIG. 3A

### Results after applying FHHP activation energy

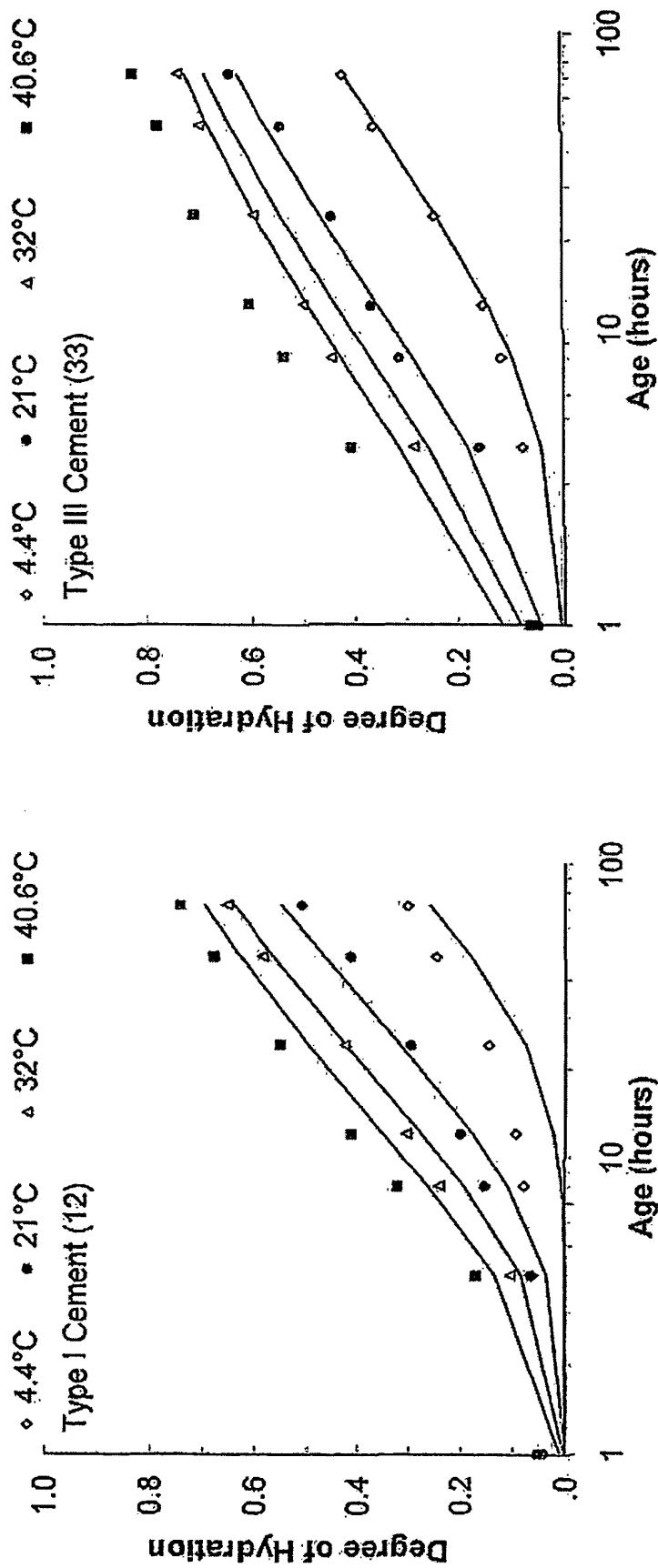


FIG. 3B

FIG. 3C

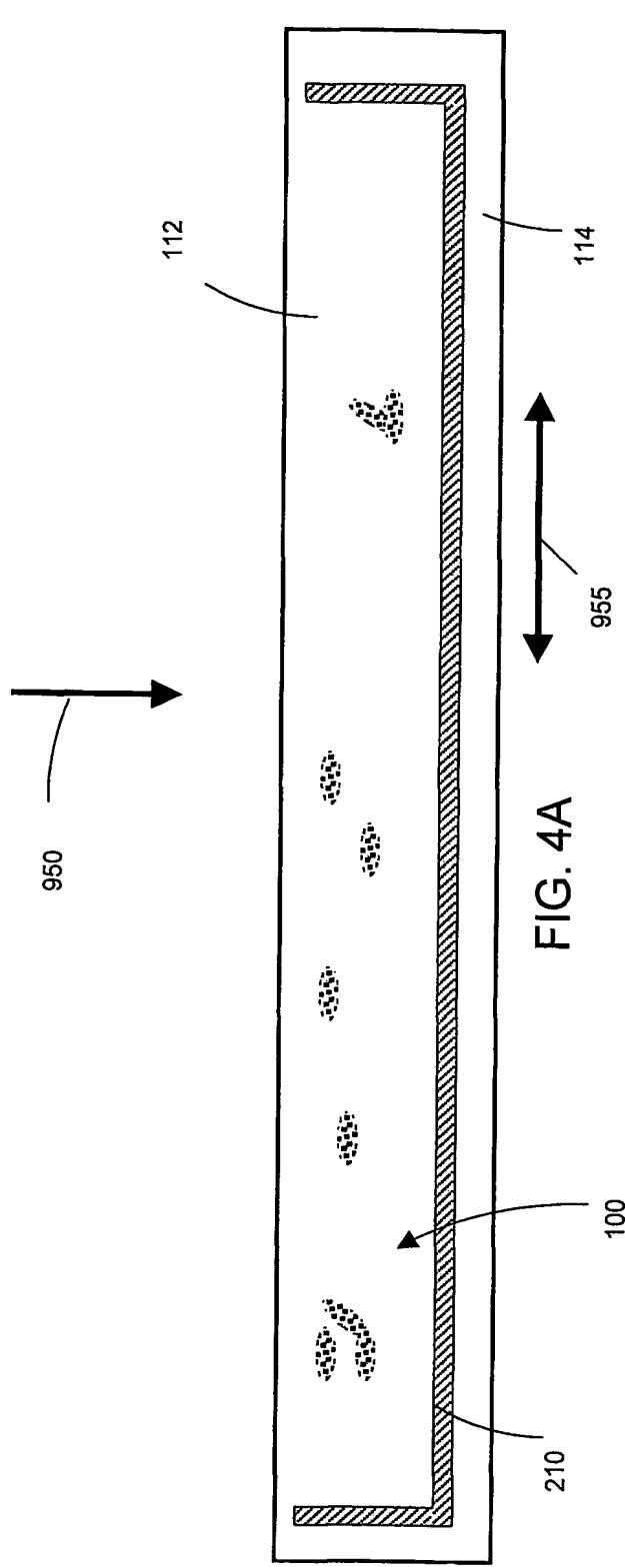


FIG. 4A

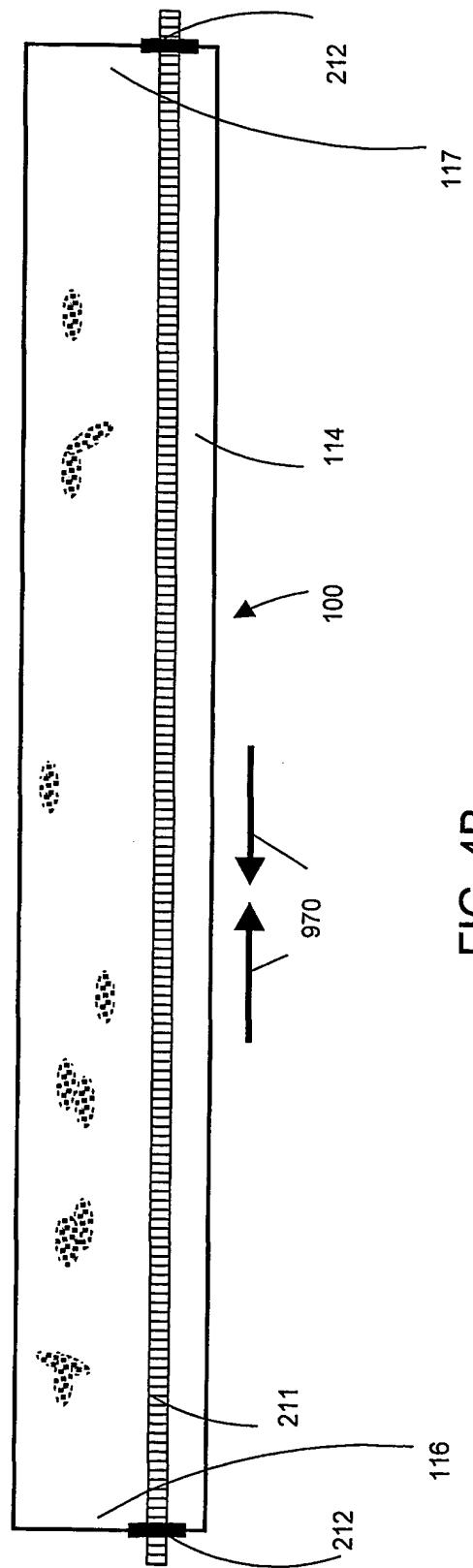


FIG. 4B

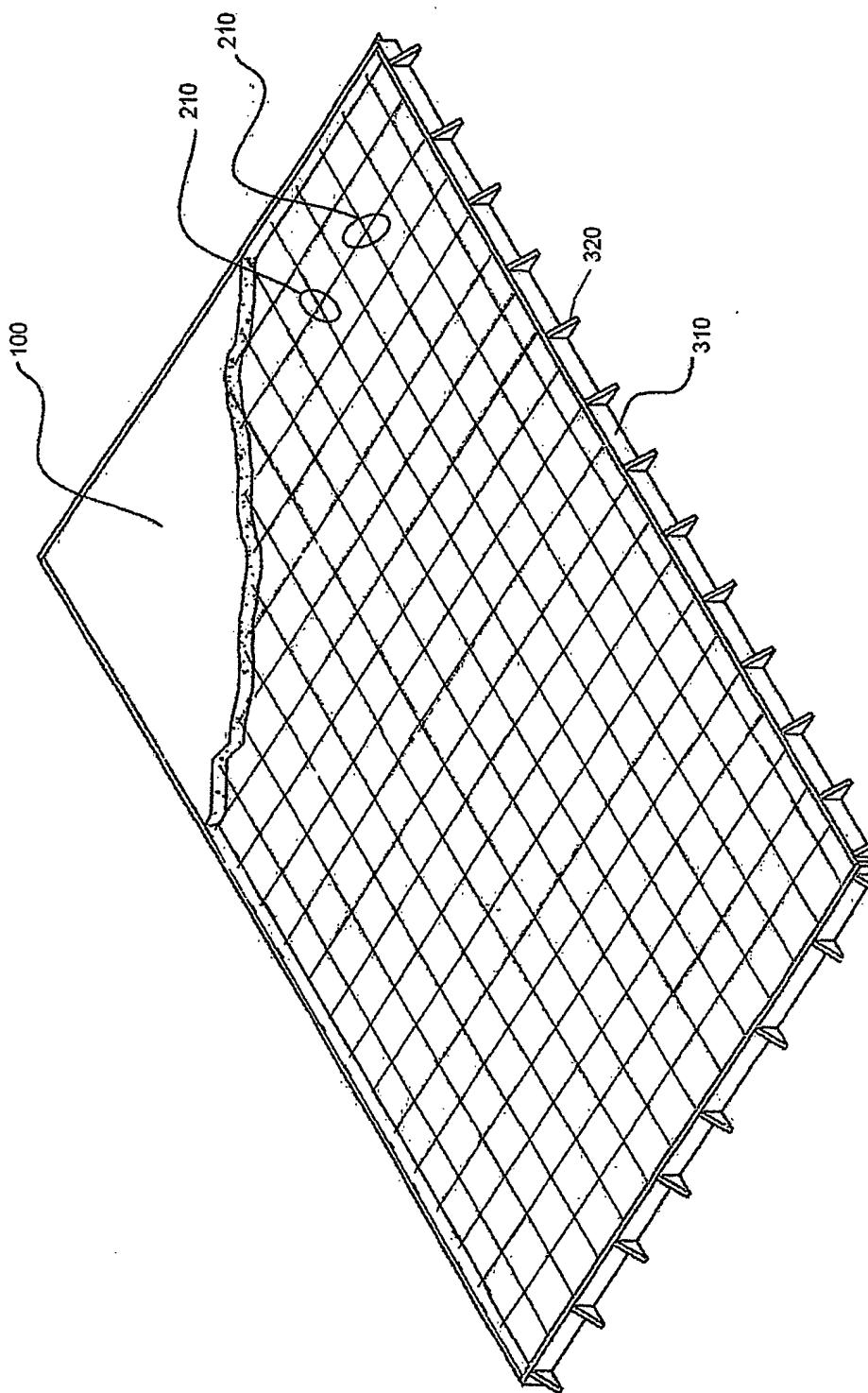


FIG. 5

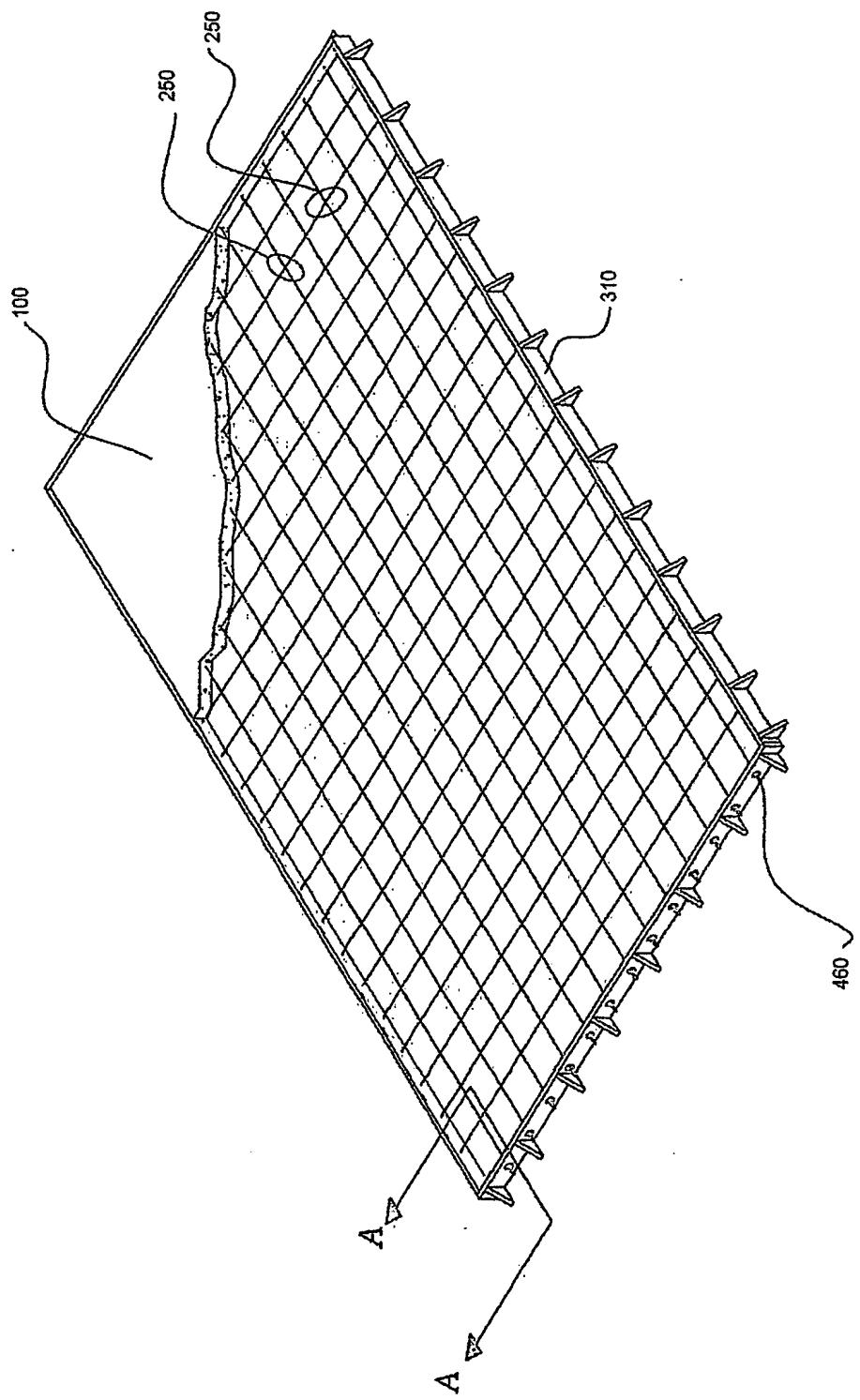


FIG. 6

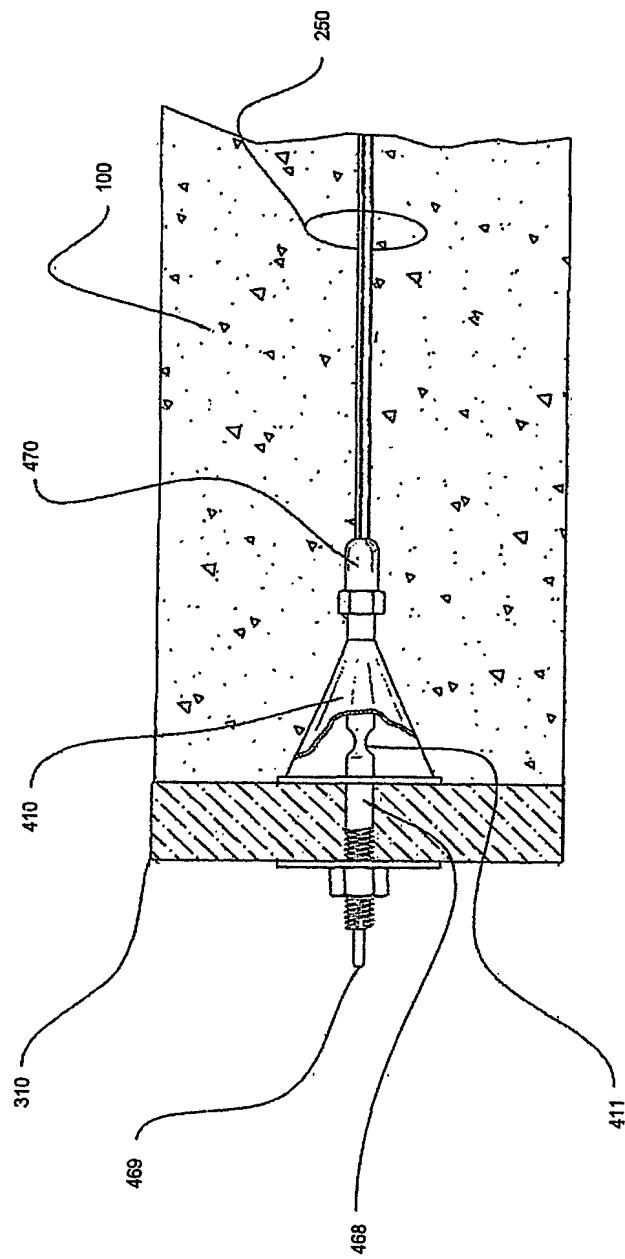


FIG. 7

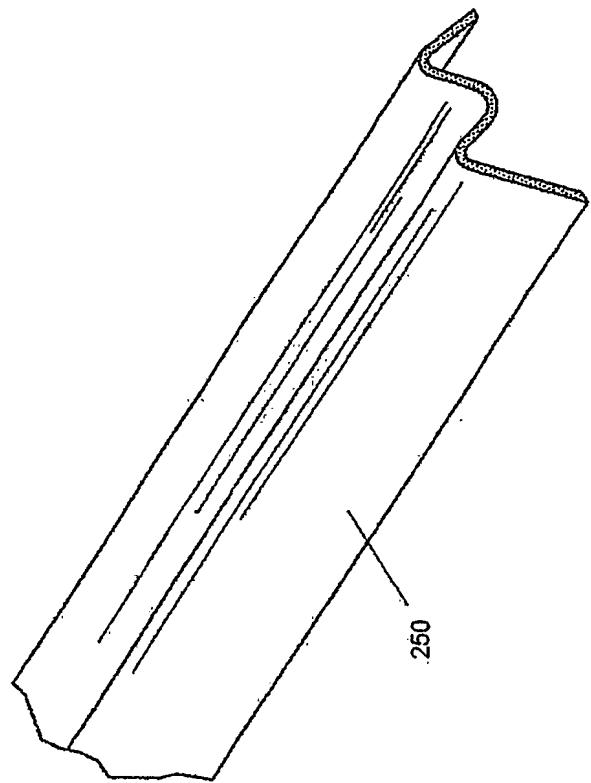


FIG. 8

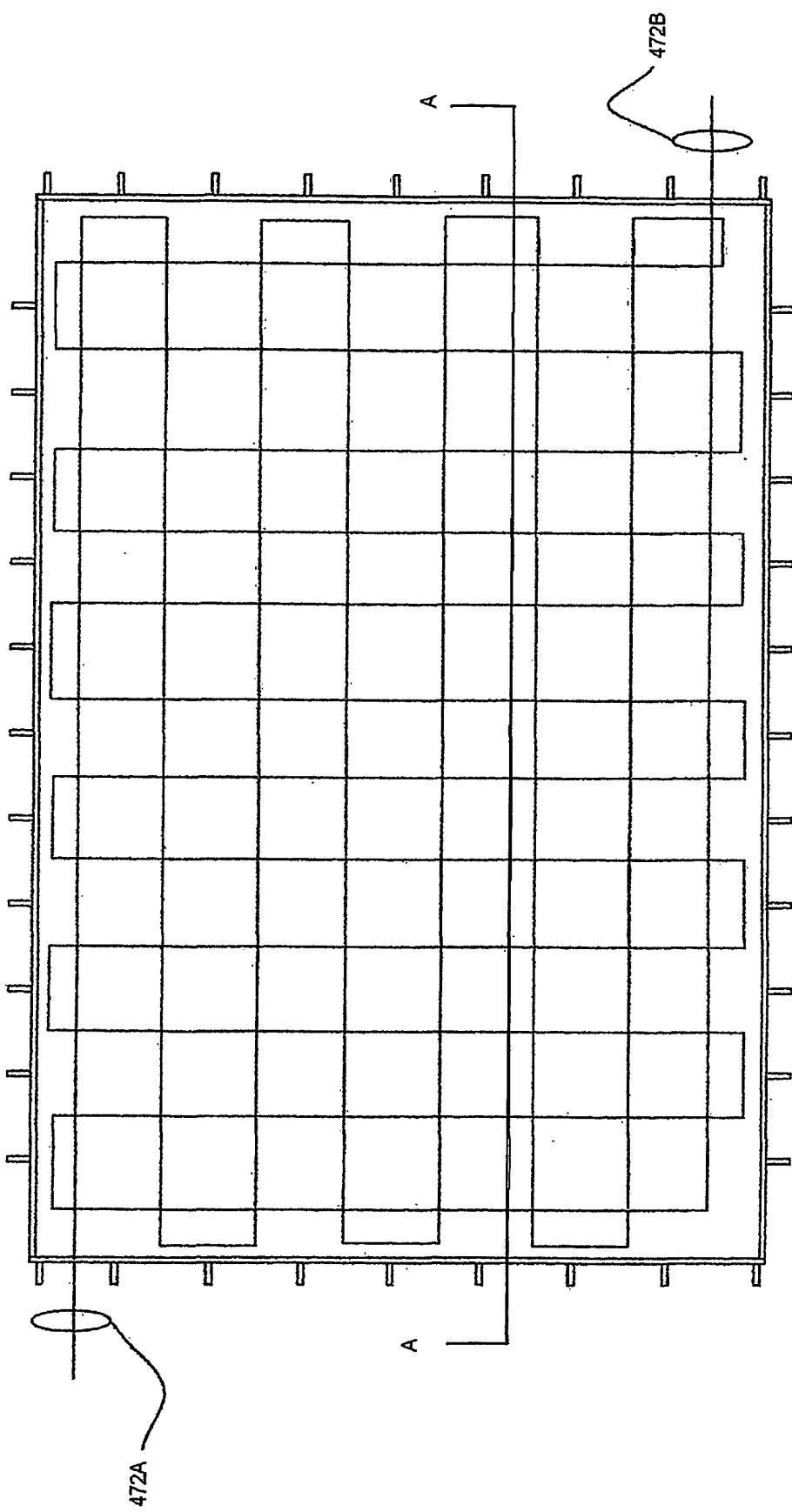
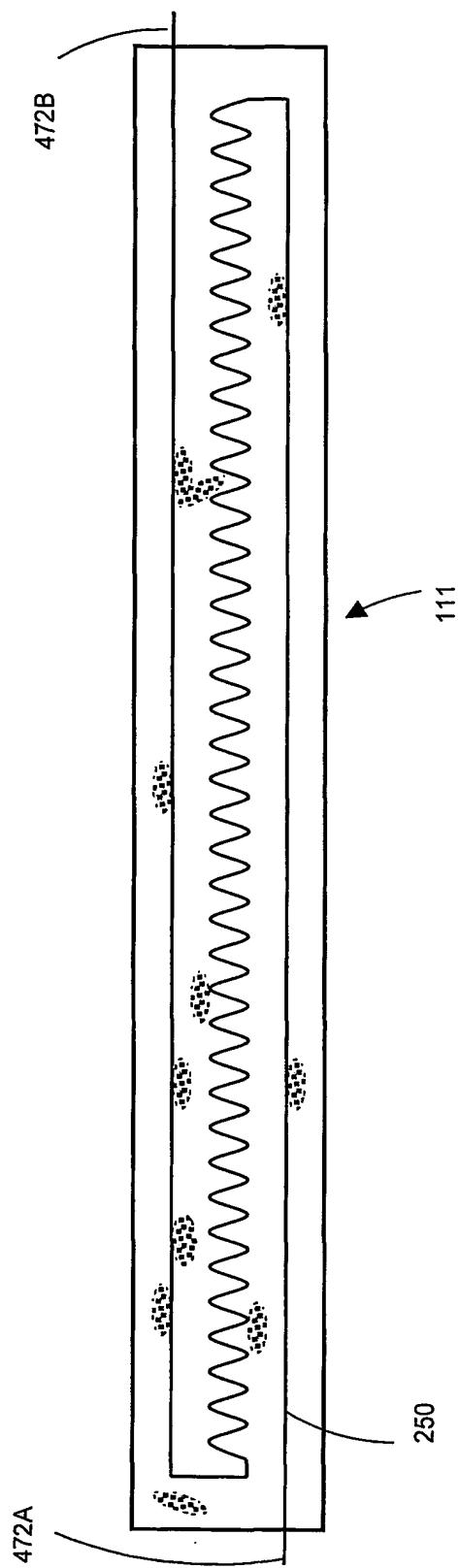
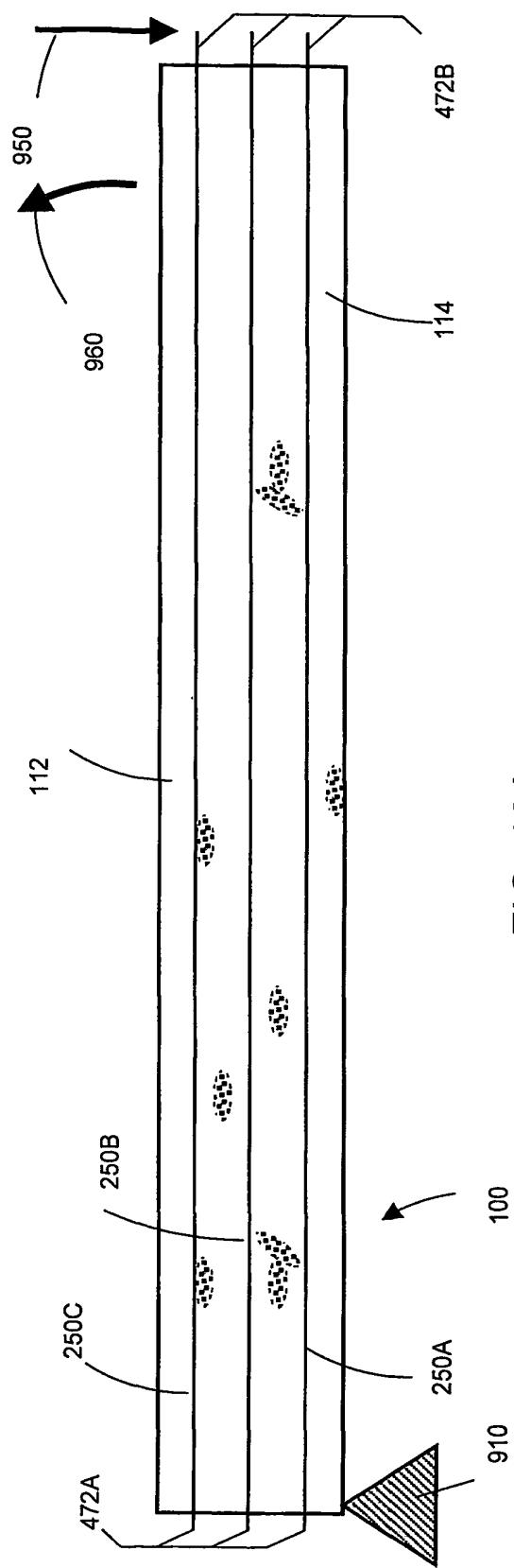


FIG. 9



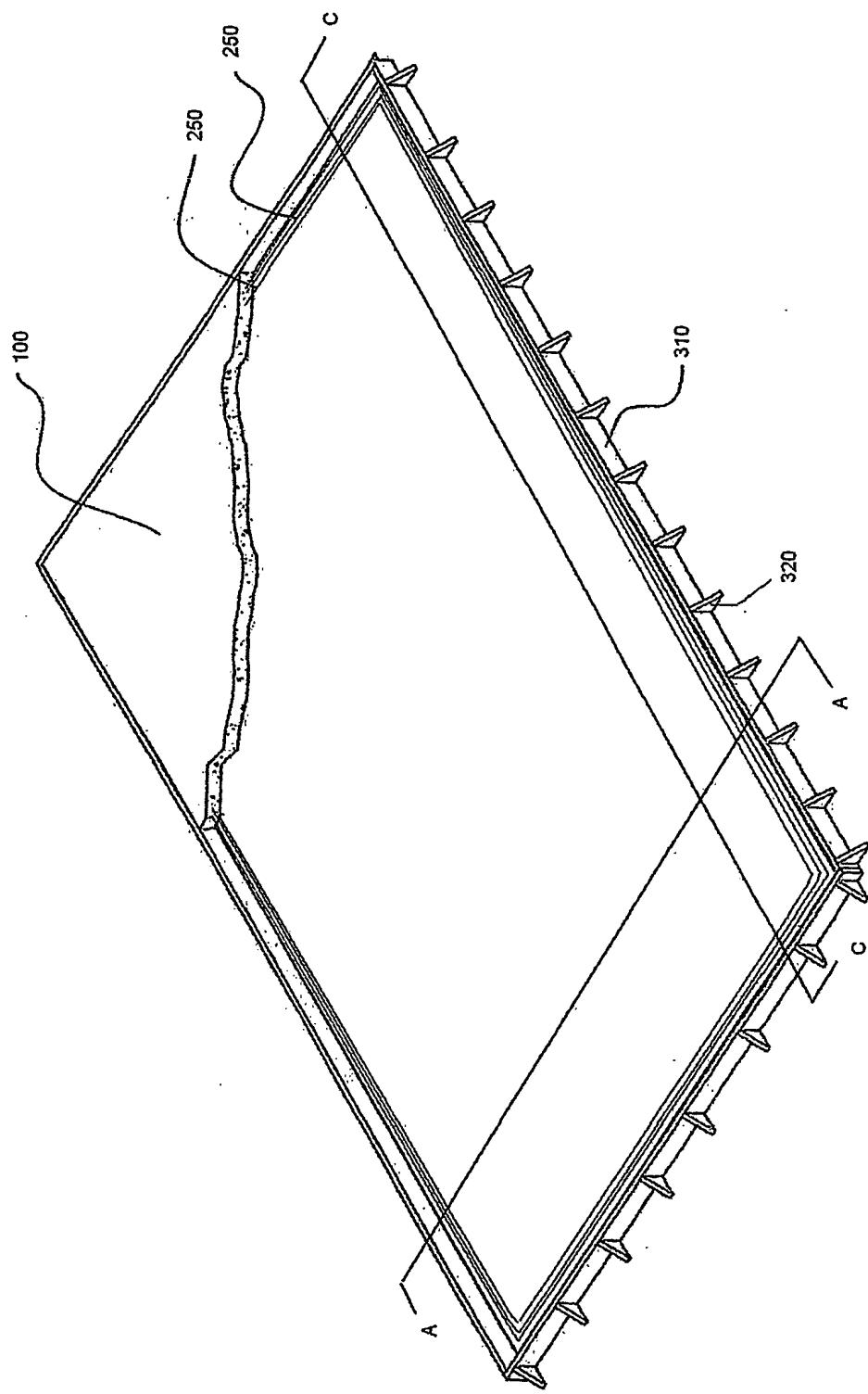


FIG. 11A

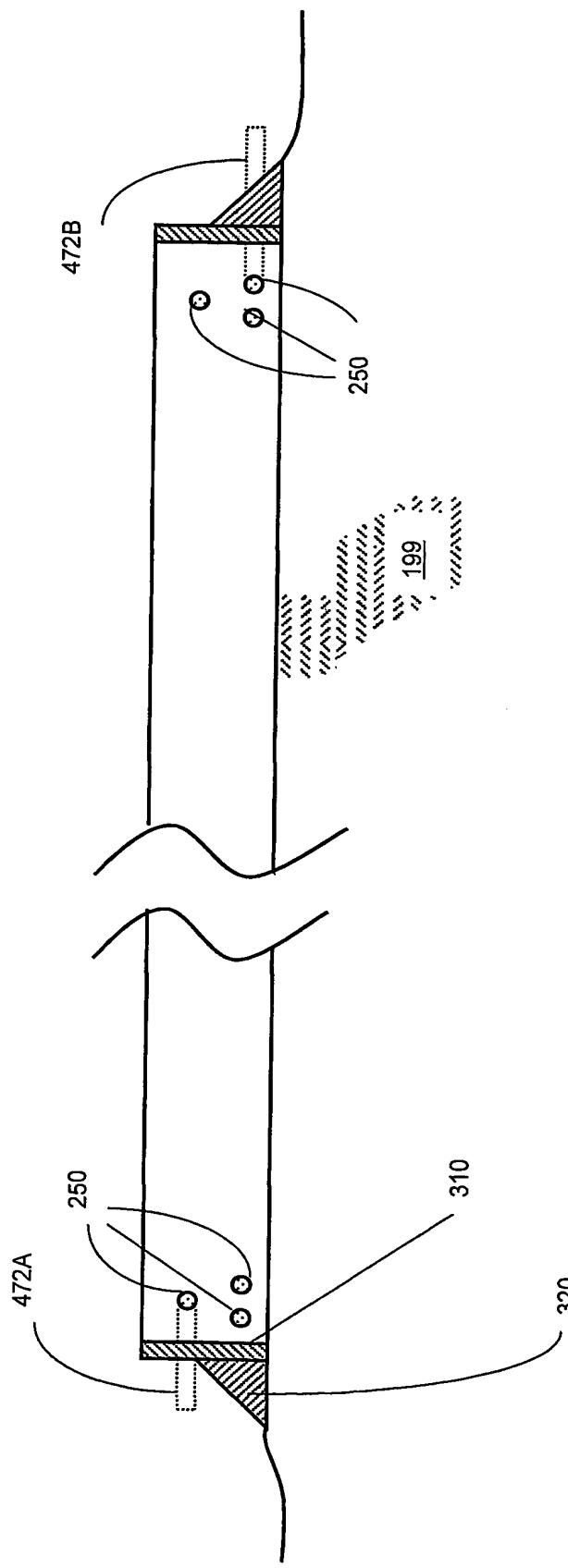


FIG. 11B

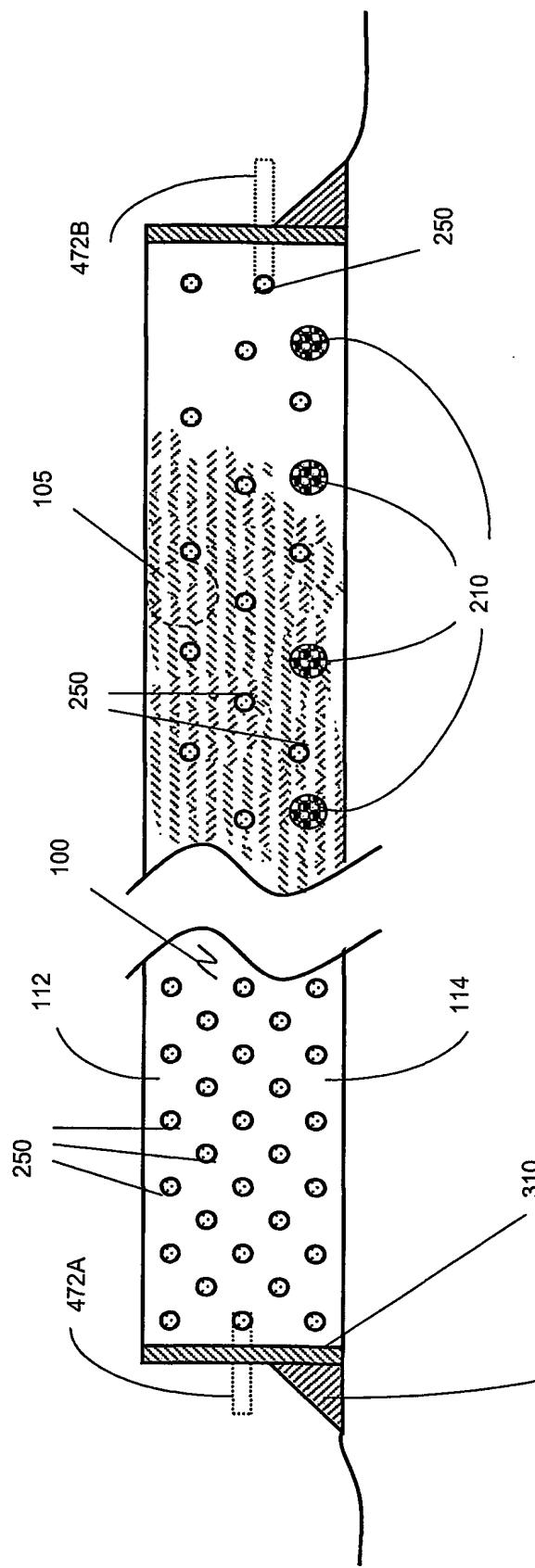


FIG. 11D

FIG. 11C

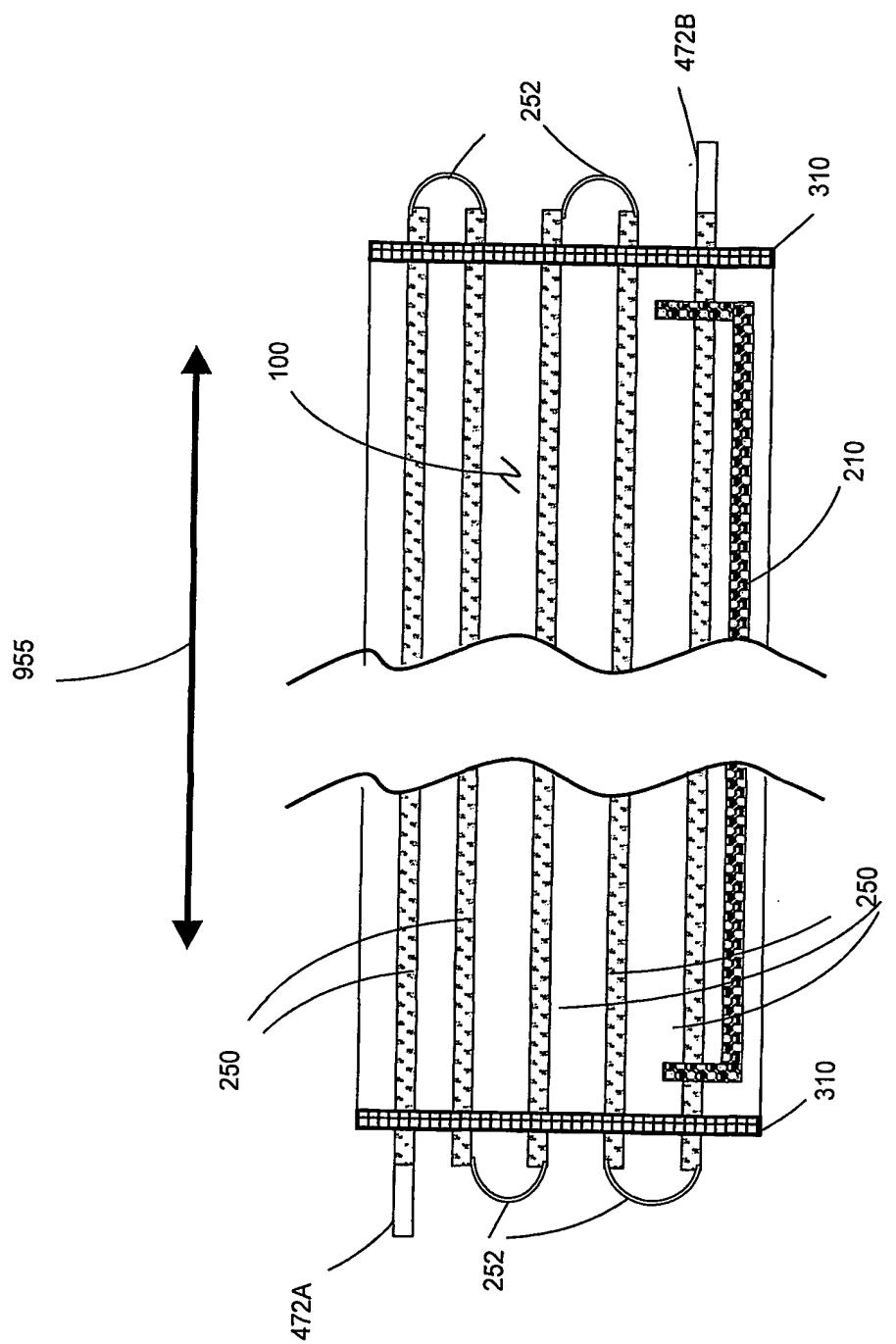
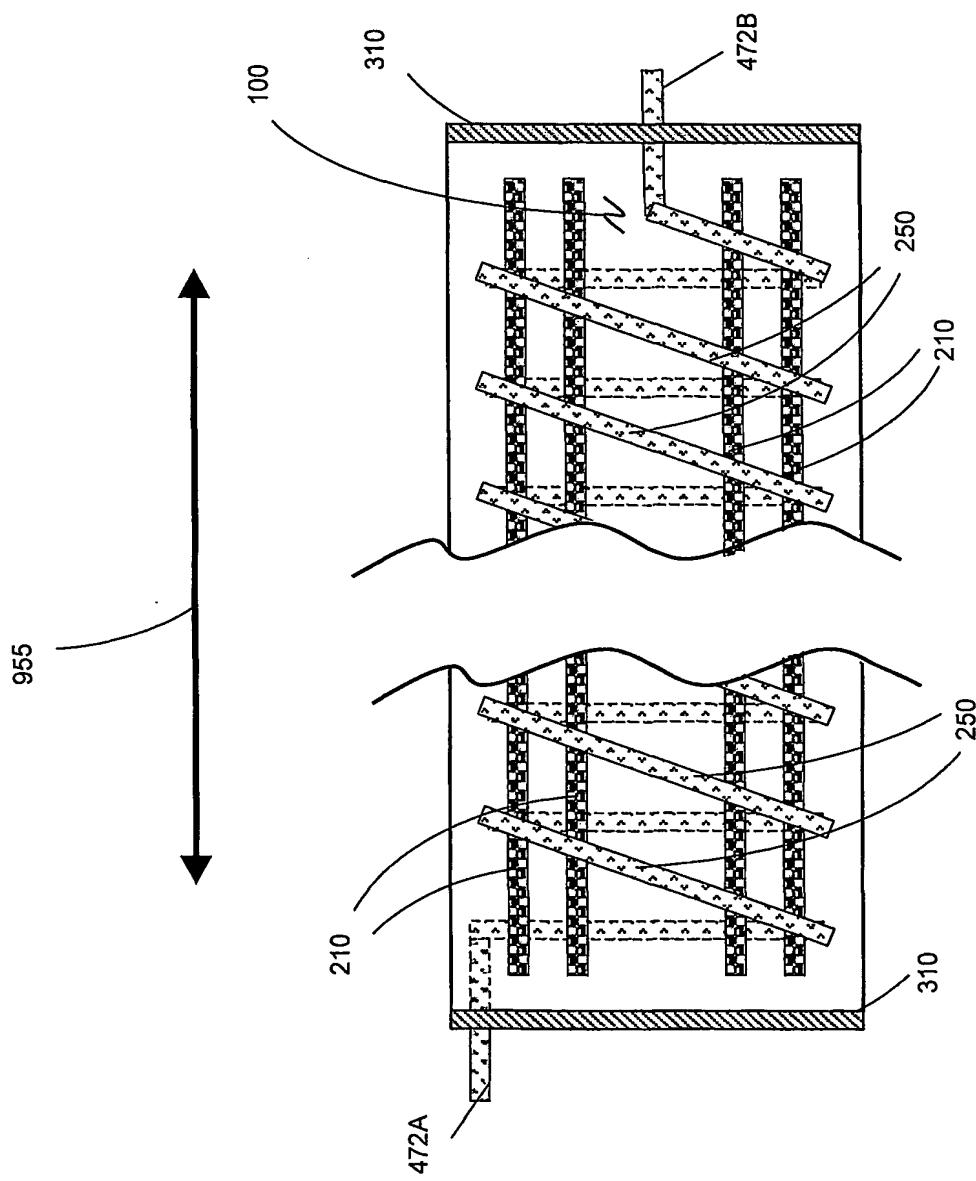
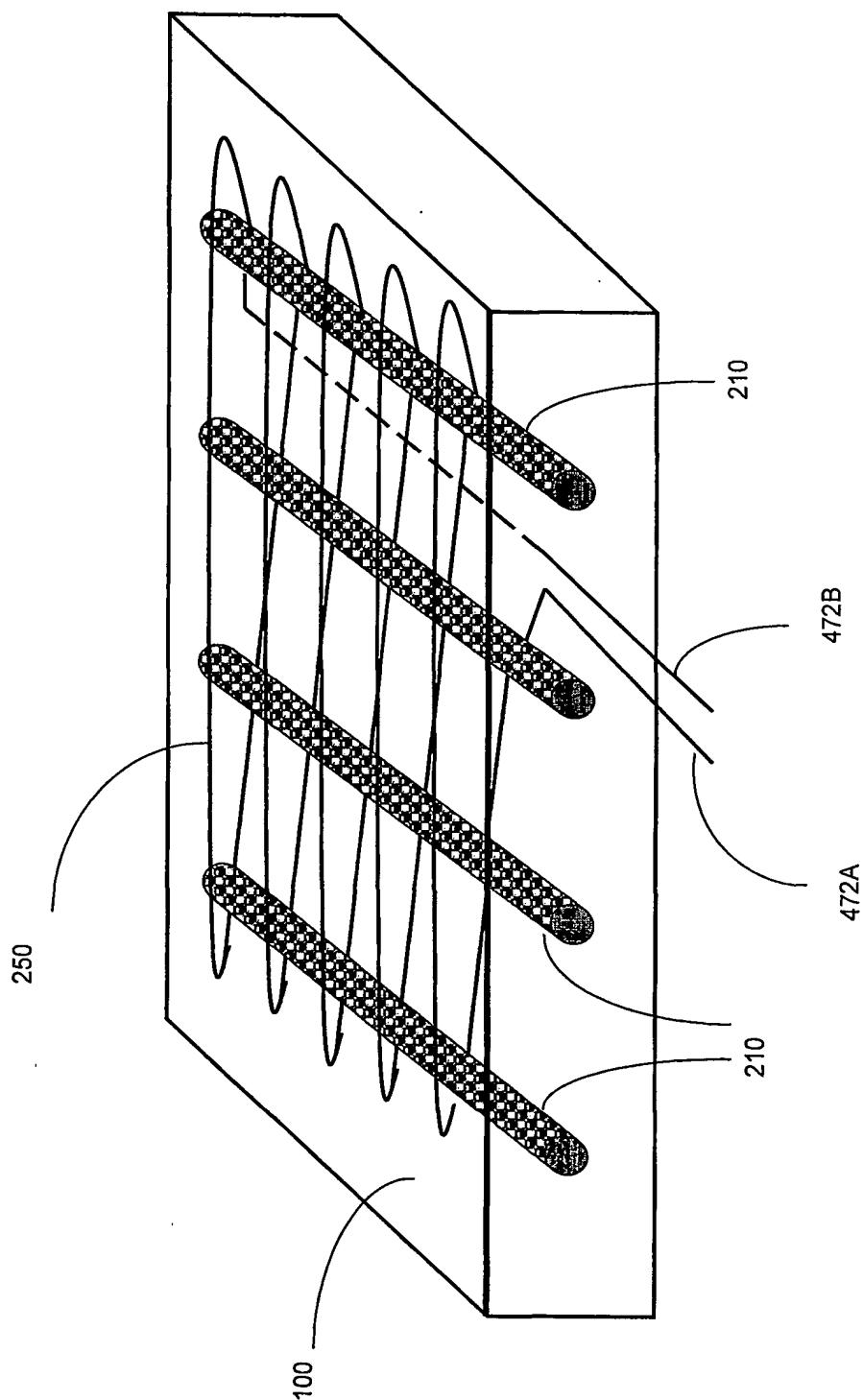


FIG. 12

FIG. 13



**FIG. 13A**

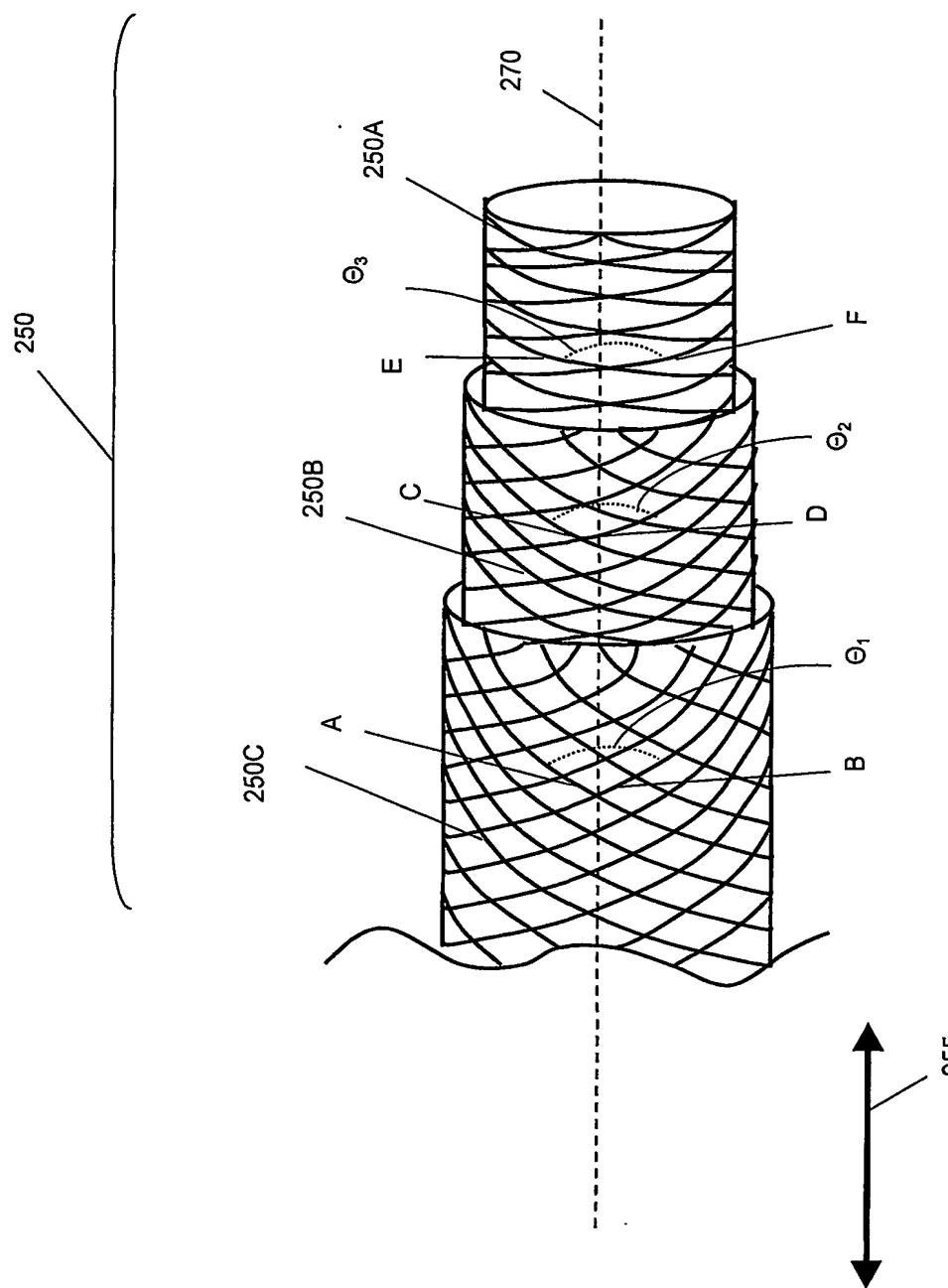


FIG. 14

$\Theta_3 < \Theta_2 < \Theta_1$

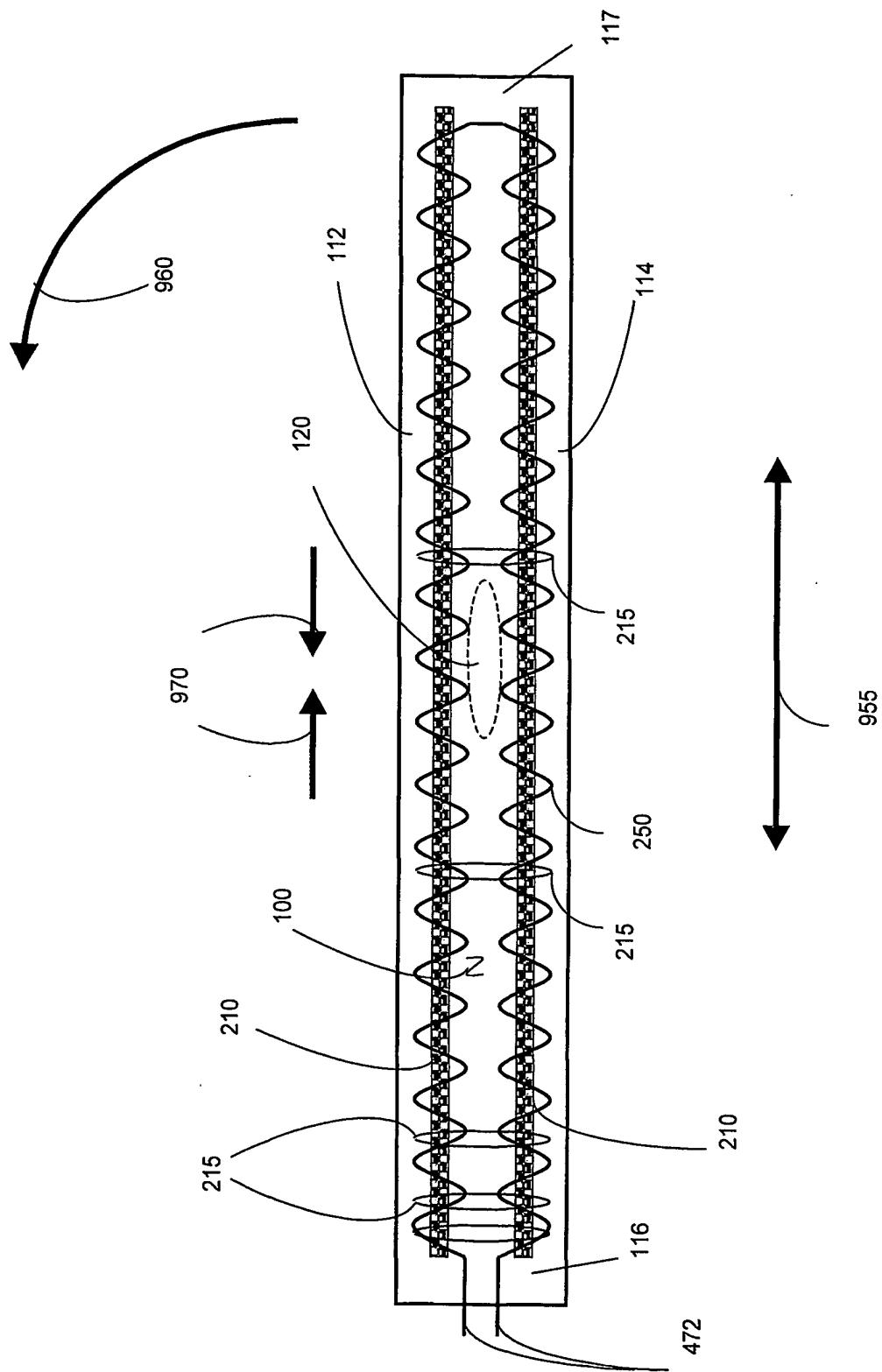


FIG. 15

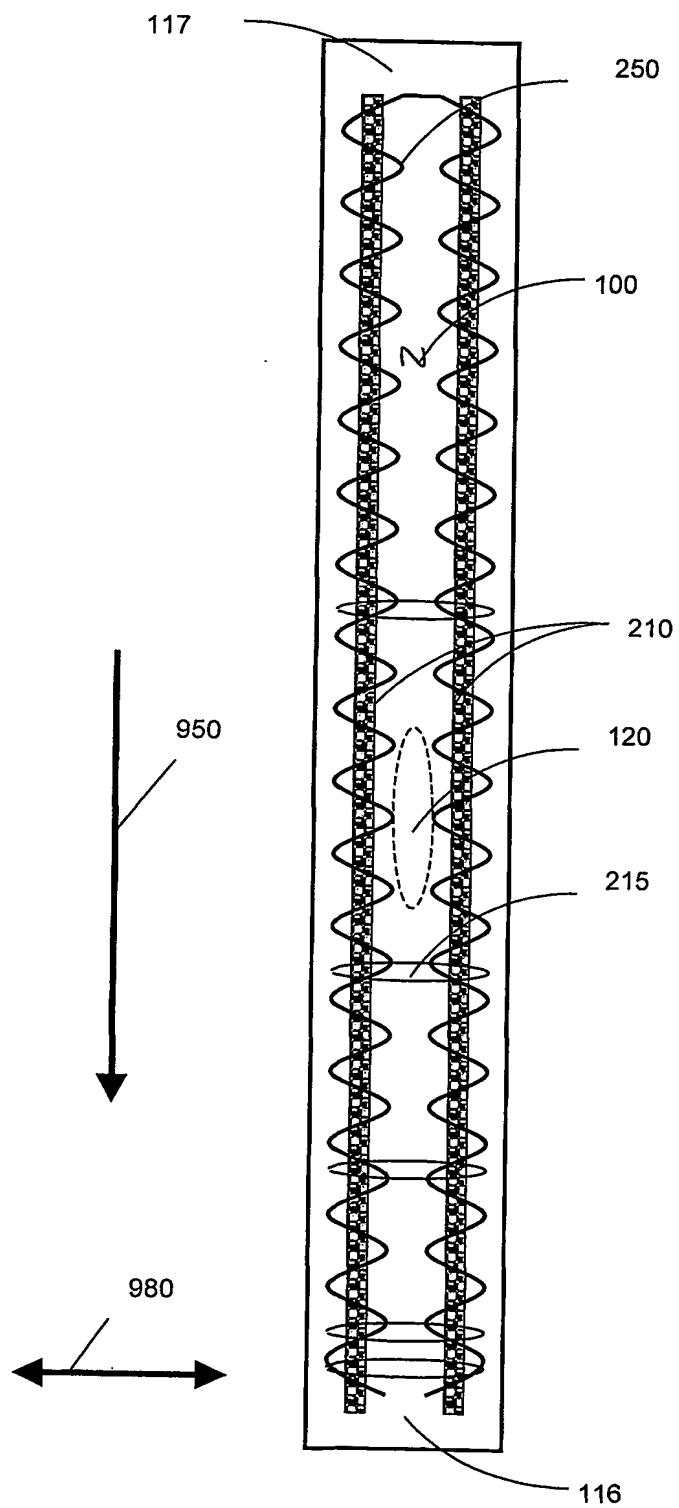


FIG. 15A

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS**
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- FADED TEXT OR DRAWING**
- BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- SKEWED/SLANTED IMAGES**
- COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- GRAY SCALE DOCUMENTS**
- LINES OR MARKS ON ORIGINAL DOCUMENT**
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**